



ESH Program

June 4-6, 2007

Keith Schuh



Overview

- Safety & Health
 - Support Personnel
 - Hazard Assessment & Integrated safety Management (ISM) Plan
 - Radiation Safety
 - Safety Assessment Document
 - Shielding Assessment
 - Work Planning/Hazard Analysis
 - Civil Construction Phase
 - Installation Phase
- Environmental
 - National Environmental Policy Act (NEPA)
 - Environmental Assessment (EA)
- ESH Reviews
 - Committee Reviews
 - Operational Readiness
- Summary



Safety & Health

- NOvA Hazard Assessment
 - Completed
 - Assessment Covers Civil Construction, Installation, Operations and Decommissioning
 - Assessment identifies hazards and remediation associated to each phase of work
 - Fire & Life Safety Analysis for FNAL & Ash River
- NOvA Integrated Safety Management Plan
 - Define Line Management Responsible for Safety (PMP/PEP/FESHM)
 - Define Clear Roles & Responsibilities (PMP/FESHM)
 - Define Competence Commensurate with Responsibilities (ITNA/TRAIN))
 - Define Balanced Priorities (PMP/PEP)
 - Identification of Standards & Requirements (FESHM/Work Smart Set)
 - Hazard Controls Tailored to Work (HA/PPE/TRAIN)
 - Operation Authorization (Work Notifications/Permits/Inspections/Reviews)



Safety & Health

- **Radiation Safety**
 - Preliminary Safety Assessment Document (pSAD)
 - Gap Analysis of Shielding Assessment
 - Evaluate & Update all applicable Shielding Assessments & Safety Assessment Documents as necessary
 - Periodic coordination meetings between Project Management and Divisional ESH/Radiation Safety Management
 - More specifics will be addressed in other breakout talks
- **Work Planning & Hazard Analysis**
 - Civil Construction Phase
 - Weekly Construction Project Management Meetings with Subcontractor
 - Tool Box Meetings & Training
 - Regular ESH Site Inspections
 - Installation Phase
 - Installation Coordination Plan
 - Regular Work Planning Meetings between all levels of Supervision
 - Daily planning meetings during Installation
 - All work will follow FESHM



ESH/QA Reviews

- Development of a NOvA ESH Review Committee
 - Formal Appointment of Committee by PPD/AD Head
 - Develop Review Criteria
 - Develop ESH/QA Review Document Database
- Review Process for Components
 - Document Process and distribute to Managers
 - Reviews are initiated by responsible Level 2/3 Managers
 - Coordinated by NOvA ESH Coordinator
 - Independent Reviewer
 - Safety, Structural, Electrical, & Mechanical Engineers
- Types of Reviews
 - Conceptual, Design, & Readiness
- Operational Readiness Review
 - Committee in place



Summary

- Complete Fire & Life Safety Analysis for FNAL
- Complete Development of ISM Plan to include both FNAL & Other Laboratories/Universities/Institutions through MOU/SOW Process
- Evaluate & Update NuMI SAD and Necessary Shielding Assessments
- Update NOvA HA (New Building Layout & Devcon 60)
- Develop Installation Coordination Plan
- Complete Environmental Assessment Process
- Develop ESH Review Process